

6. Would you be willing to train medical students or other physicians? Yes—6 No—1
7. In what way was the librarian's assistance useful:
 - a. instruction in use of sources—3
 - b. finding materials—3
 - c. assistance in developing search strategies—1
 - d. librarian not useful—2
 - e. other
8. How would you describe the time limits imposed by the instructor:
 - a. insufficient
 - b. too much
 - c. just right—5Estimated time spent on the project: Mean = 1 hour
9. Did you find the structuring of the project (circle all that apply):
 - a. too rigid
 - b. too flexible
 - c. just right—4
 - d. helpful—2
10. Did you find EBM techniques (circle all that apply):
 - a. improved patient care—4
 - b. useful continuing education—7
 - c. improved my confidence in practicing medicine—2
 - d. not useful
 - e. confusing—1
 - f. time consuming—2
 - g. time saving—1
11. How would you rate the exercise overall:
 - a. Excellent—1
 - b. Good—6
 - c. Fair
 - d. Poor

The SEND (SouthEastern Network on DOCLINE) Project: a reciprocal document delivery network*

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The SouthEastern Network on DOCLINE (SEND) is a group of eighty-seven primary access libraries from the Southern Chapter of the Medical Library Association. SEND is a reciprocal interlibrary loan (ILL) network based on two fundamental ideas: (1) that basic health sciences collections can assume more of the ILL burden among themselves, and (2) that DOCLINE tables can be manipulated to ensure balanced ILL traffic [1]. Using these assumptions, the SEND group has produced significant cost savings in document delivery and has become an unusual multistate network of libraries based on reciprocal interlibrary loan.

LITERATURE REVIEW

Standard ILL consortia are common in many areas, but cooperative networks of primary access libraries serving multistate areas are not common. One network was found in the literature review, the Basic Health Sciences Network (BHSL) [2].

The BHSL is a long-standing large multistate network with 460 members in 1994 based in region 1 of

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the National Network of Libraries of Medicine (NN/LM). The BHSL, begun in 1986, has an autonomous governing body, charges an initial membership fee, and recruits members from existing consortia and networks. Its hierarchical borrowing structure is based on collected statistics. Positioning of BHSL libraries within the DOCLINE routing tables is based on how many loans are filled yearly. Libraries failing to submit statistics are positioned as first-resort lenders among BHSL libraries. BHSL puts all its network members in the middle range of DOCLINE routing table cells.

A similar group was formed in June 1989 by participants at the Area Health Education Center (AHEC) National Workshop in Louisville, Kentucky [3]. The National AHEC Network via DOCLINE (NAND) is a cooperative network among AHEC-affiliated libraries, information centers, and learning resource centers for the purpose of resource sharing. NAND recruits members from AHEC-affiliated institutions and uses the DOCLINE routing table cells. It places participants after first-resort lenders and before last-resort (charging) libraries. NAND features free reciprocity among smaller libraries but has one group of libraries with larger collections that charge a fee for document delivery. This system is intended to avoid overuse of the larger collections.

BACKGROUND

A group of interested librarians met informally at the Southern Chapter of the Medical Library Association meeting in Atlanta in 1990 to discuss forming an interlibrary loan network. Smaller library holdings were assumed to vary widely enough that formation of a multistate reciprocating group outside existing ILL agreements would prove beneficial.

The idea of grouping participants by number of current subscriptions rather than geographical location had already been tried by NAND, and SEND libraries agreed that this same structure would work best. However, unlike BHSL or NAND, SEND was designed to provide free interlibrary loans among all its member libraries. This free loan among a regional grouping of various sized libraries is unique to SEND.

SEND did not use preexisting networks or consortia as the basis of its membership. Individual primary access libraries were recruited by a volunteer coordinator within each state, based on information about the size of library holdings as reported in the *SEMPUL Serials Union List*. Using *Union List* data, state coordinators contacted libraries in each of the SEND categories.

Forty-one libraries began SEND participation in the six states of Alabama, Florida, Georgia, Mississippi, South Carolina, and Tennessee in late 1991 and early 1992 as DOCLINE routing table changes became effective. A three-month pilot phase of SEND was implemented and evaluated from April through June

Table 1
SEND ILL statistics 1997

	Lending	Borrowing
SEND Category 1	2,477	2,518
SEND Category 2A	2,669	2,815
SEND Category 2B	3,147	2,547
SEND Category 3	2,491	3,153
SEND Category 4	1,139	910
Totals	11,993	12,004

1992. In the three months, over 1,700 interlibrary loans were transacted among SEND participants.

PRESENT STRUCTURE AND RESULTS

SEND libraries are grouped into DOCLINE routing cells based on number of current subscriptions rather than geographical areas. Most participating SEND libraries already have existing interlibrary loan agreements and consortia that are usually geographically based. SEND supplements these first-resort lender agreements with additional free primary access libraries.

Each SEND library is ranked by the number of current subscriptions, which classifies it into a SEND category and its corresponding DOCLINE cell:

- Category 1 libraries with under 100 subscriptions—cell 3
- Category 2 libraries with 100 to 199 subscriptions—cells 4 and 5
- Category 3 libraries with 200 to 299 subscriptions—cell 6
- Category 4 libraries with over 300 subscriptions—cell 7.

The SEND coordinator develops a model DOCLINE routing table with SEND libraries placed in cells 3 through 7. Participants are instructed to reposition any SEND libraries with which they have preexisting reciprocal relationships within their cells 1 and 2. Document delivery costs have been reduced for SEND members through this table design, which places SEND libraries prior to fee-based lenders. Because SEND is a DOCLINE-enabled network, membership capacity is determined by the system's routing table capacity.

SEND has worked well to maximize the lending potential of basic health sciences collections and to use DOCLINE effectively to balance traffic. Statistics collected in 1995 and 1997 show consistent levels of ILL activity. Over 10,000 interlibrary loan transactions were completed in 1995 and again in 1997 among SEND members. Before SEND's inception, the lenders in these transactions would have been fee-based with the loan costs estimated at around \$108,000 using the standard ILL charge of \$9.00 each.

Table 1 shows the results for 1997. Category 2 has been divided into two groups because of the number

Table 2
Loans received

Participants	Loans received	Savings
40	100 or less	\$27–\$900
22	101–200	\$909–\$1,800
12	201–300	\$1,809–\$2,700
9	Over 301	\$2,709–\$8,721

of participating libraries. The lending and borrowing figures do not agree, probably because a few reporting libraries failed to exclude local preexisting consortia library traffic.

Before SEND, many ILL requests that routed beyond existing consortia went to charging resource libraries. With SEND, any ILL requests that were filled by SEND members saved money for the requesting libraries. Eighty-three participants out of eighty-seven (97%) reported that they had received articles from other SEND members. Cost savings for individual participants varied greatly depending on the level of ILL activity and preexisting ILL agreements. The lowest reported number of articles received was three (cost savings \$27) to the highest activity of 969 articles received (\$8,721). Average number of articles received from SEND members was 144.5, for an average cost savings of \$1,300.50 per individual participant.

DISCUSSION

Only a few libraries have withdrawn from the SEND group. Mergers and downsizing have taken their toll as some libraries have been phased out of existence or merged with others. One psychiatric library and two institutions with large library collections withdrew, citing disproportionate numbers of lending and borrowing requests.

Larger libraries that are potential net-lenders are those libraries that have highly specialized or retrospective holdings. These collections are positioned in cells higher than their collection size suggests. Several VA hospitals, several childrens' hospitals, and a library with extensive retrospective holdings have been placed at least one cell higher than their subscriptions would dictate.

Since its inception, SEND has operated totally through the volunteer effort of members and state coordinators and the active support of the Southeastern/Atlantic Regional Medical Library (RML) staff. State coordinators duplicate and mail information to participants, collect statistical information, and follow-up with non-respondents. The individual participant libraries collect and report statistics and change DOCLINE routing tables when requested. No special funds, grants, or staff have been used to start, test, analyze, or expand SEND.

As participants were recruited, a standard routing table was devised and distributed to each SEND member for use. After each institution adapted the table to its own situation, the table was submitted to Southeastern/Atlantic RML and National Library of Medicine (NLM) staff. The Southeastern/Atlantic RML staff and NLM staff were essential to planning and implementing the SEND model table and each network member's individual DOCLINE routing table. Profile changes are a massive undertaking, and the staff at Southeastern/Atlantic RML and NLM have been crucial factors in SEND's success.

SEND does not require free fax document delivery among its members, although many member libraries do fill requests by fax. Fax policies have remained entirely at the discretion of individual participants.

Some routing table changes to balance lending to borrowing ratios are planned for 1999. There is a waiting list of Category 1 size libraries to join SEND, and some limited space in the other categories for new members.

CONCLUSIONS

SEND has succeeded in maximizing the basic health sciences collections of primary access libraries and in using DOCLINE effectively to balance ILL traffic. This type of multistate interlibrary loan network could serve as a model for other regions. With adequate volunteer support from network members and with NLM and NN/LM regional support, SEND can be replicated elsewhere; a network called MACLend modeled after SEND has begun in the Mid-Atlantic Chapter [4].

Hospital libraries are still predominantly print-based collections. The growing use and prevalence of electronic media and full-text journals make the future of SEND uncertain. However, in the current environment, SEND has reduced the document delivery costs for participants. A regional free ILL network is valuable for libraries in any era, but especially now as health care budgets shrink.

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